Installation Guide for OPAM Oracle IDM 11g R2 PS2 Suite)

Assumption: You have already installed *Oracle IDM 11g R2 PS2 Suite*. OPAM is installed as a separate application in a separate Weblogic domain but the Middleware Home remains the same

Software Stack

Software	Version			
Oracle IDAM suite	11gR2PS2			
OPAM	11gR2PS2			
RCU	11gR2PS2			
Weblogic	10.3.6			
Database	Oracle Database 11.2.0.1.0			
Operating System	OEL 5.5			

1. Run Oracle Fusion Middleware Repository Creation Utility (RCU)

Execute RCU

cd /u01/R2_PS2_Installables/rcuHome/bin

./rcu

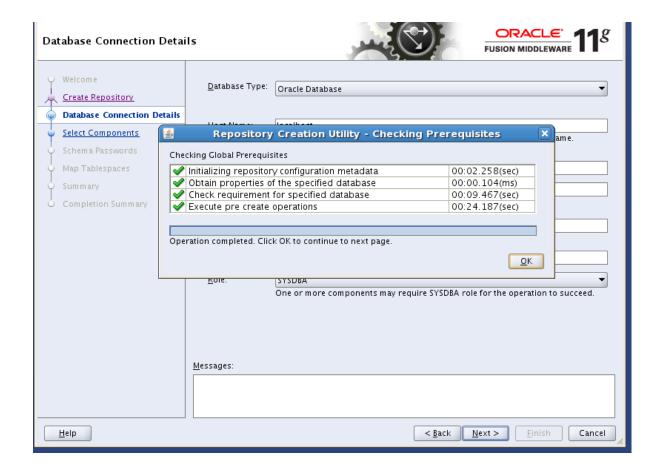
<u>File Edit View Terminal Tabs Help</u>

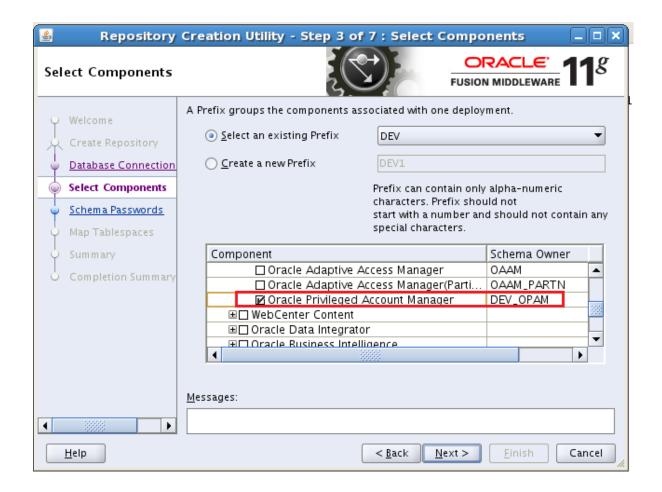
[oracle@localhost bin]\$ pwd
/u01/R2_PS2_Installables/rcuHome/bin
[oracle@localhost bin]\$

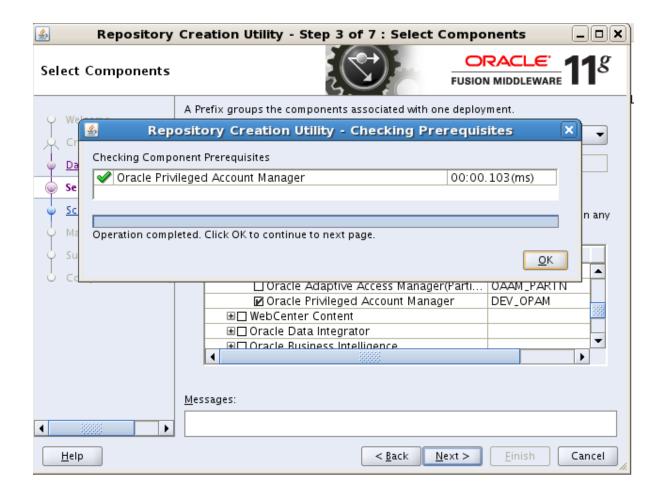




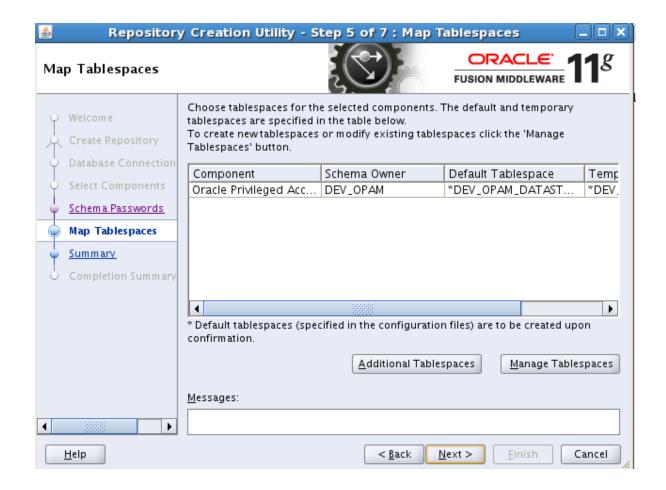


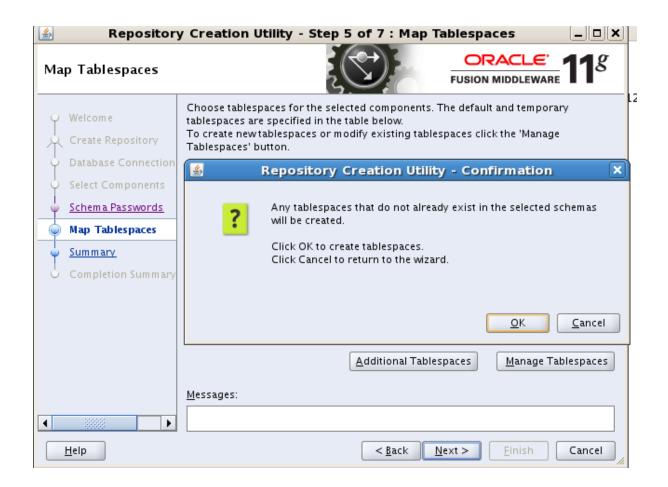


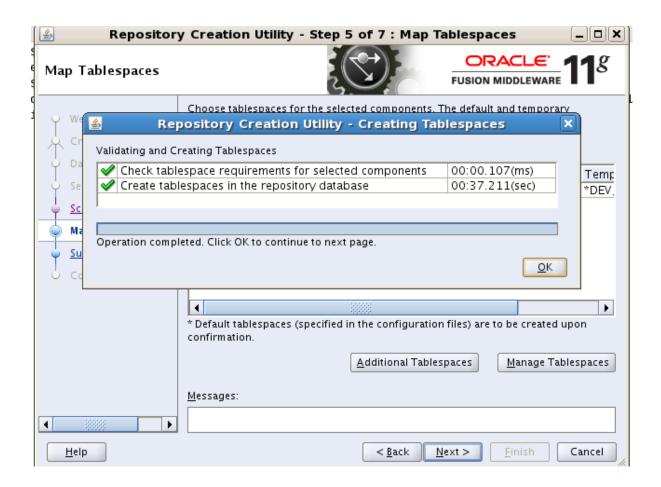


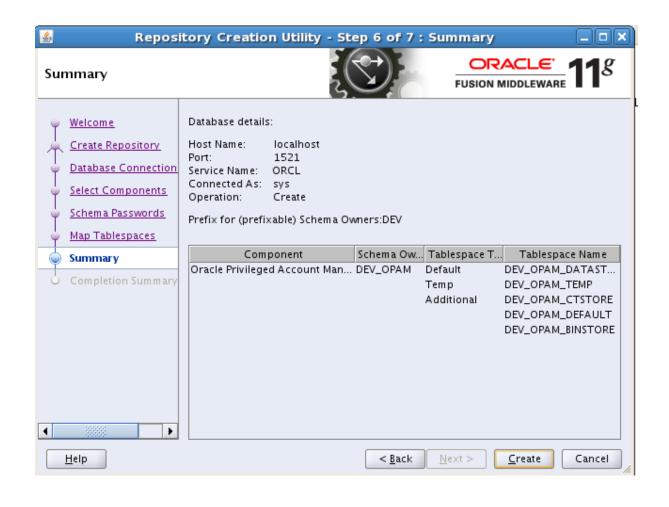


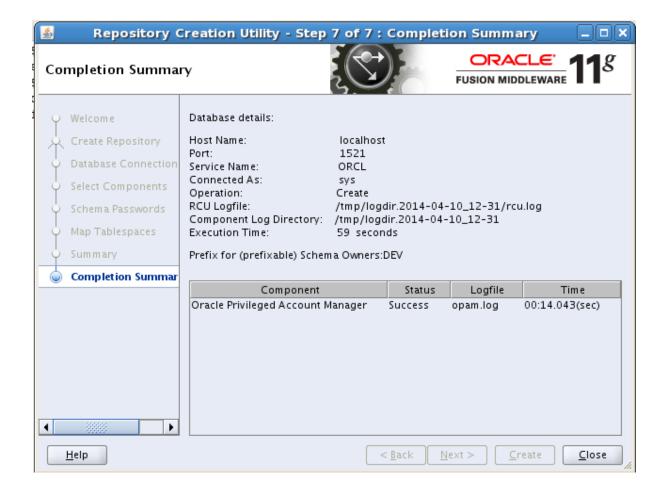












2. Run the Oracle Fusion Middleware Configuration Wizard to configure your Oracle Identity and Access Management products in a *new WebLogic domain*.

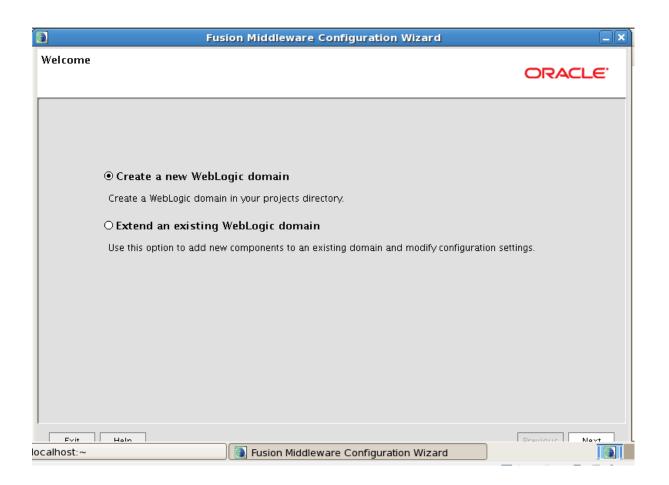
Execute the below command to start the process

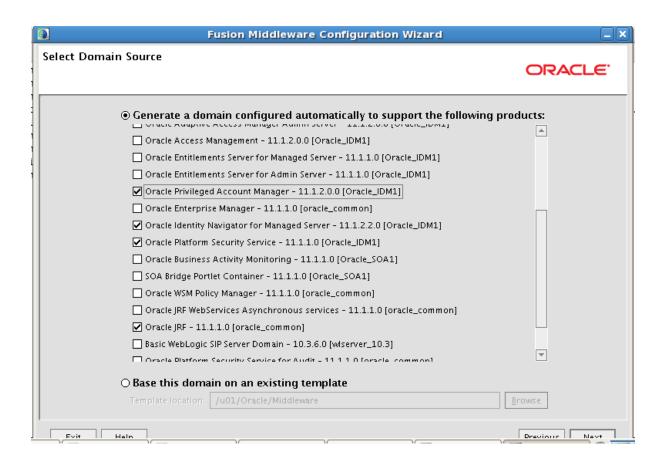
/u01/Oracle/Middleware/Oracle_IDM1/common/bin/config.sh

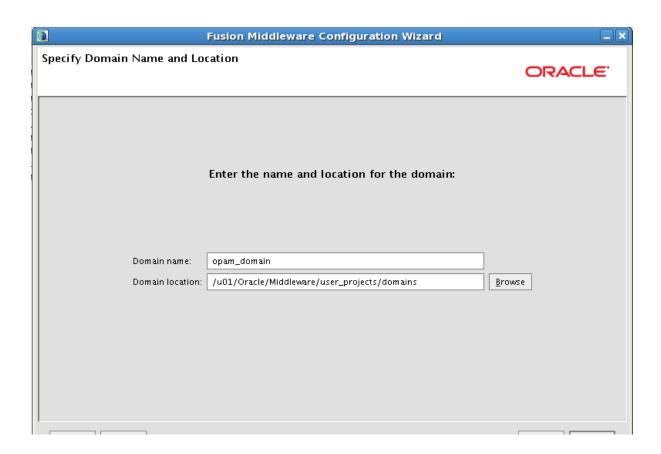
Configuration Wizard

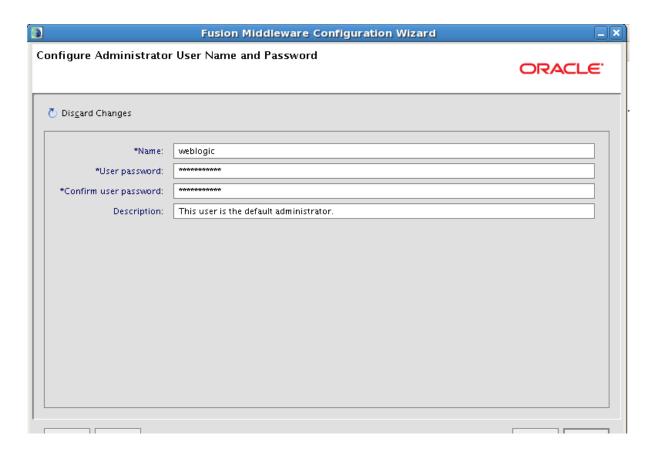
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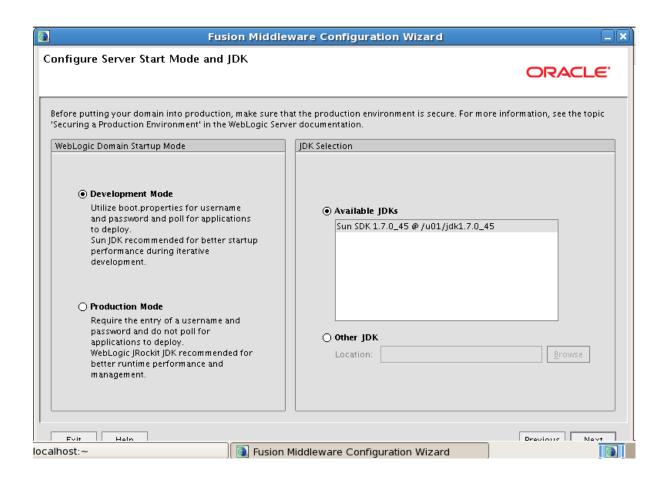




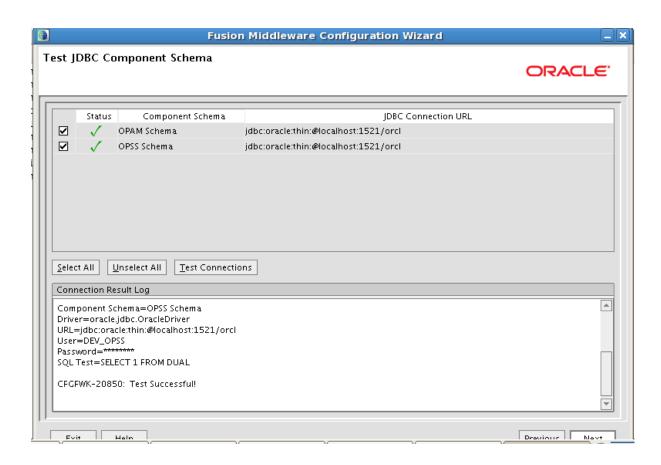


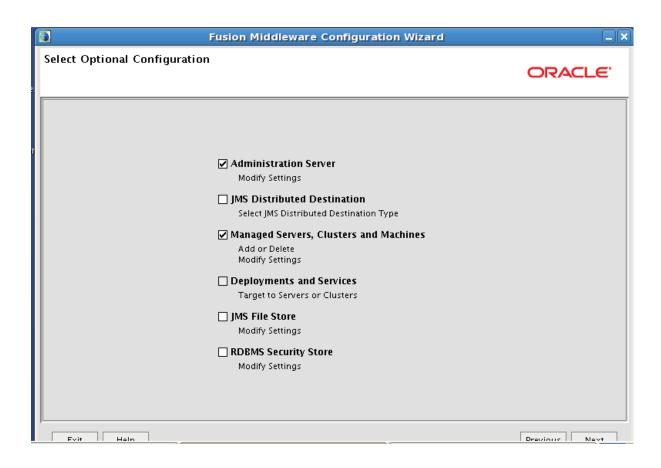


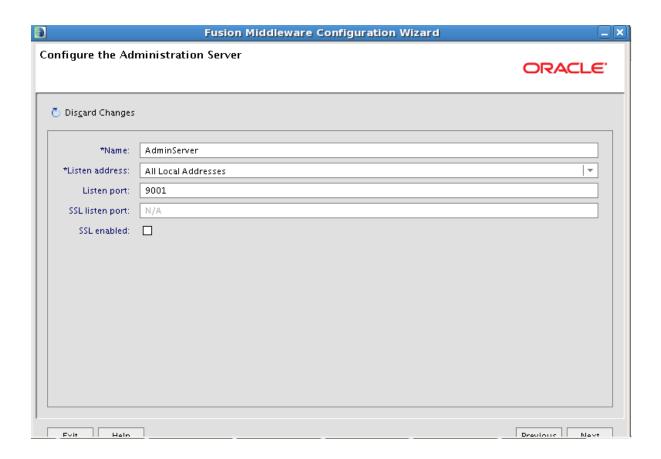


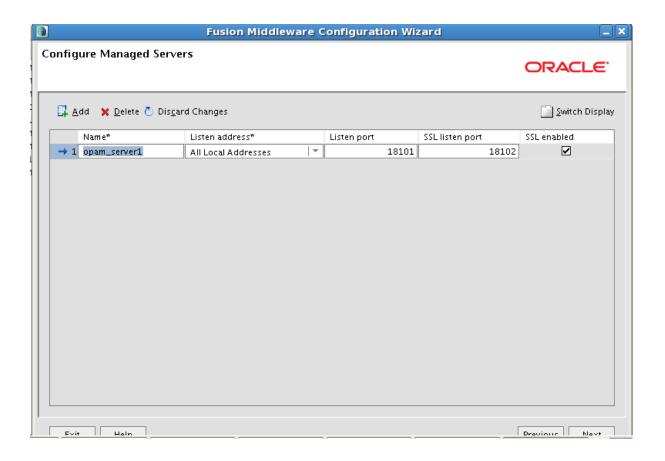


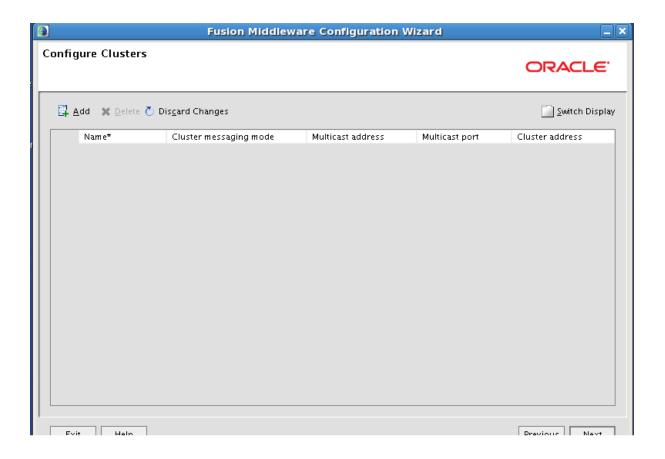
Note: Change only the input fields below that you wish to modify and values will be applied to all selected rows. Vendor: Oracle DBMS/Service: orcl Driver: *Oracle's Driver (Thin) for Service connections; Versions:9.0.1 Host Name: localhost Schema Owner: Varies among component schemas Port: 1521 Schema Password: ************************************	Fusion Middleware Configuration Wizard									
Vendor: Oracle ▼ DBMS/Service: orcl Driver: *Oracle's Driver (Thin) for Service connections; Versions:9.0.1 ▼ Host Name: localhost Schema Owner: Varies among component schemas Port: 1521 Schema Password: ************************************	Component Schema	ORACLE								
Driver: *Oracle's Driver (Thin) for Service connections; Versions:9.0.1 ▼ Host Name: localhost Schema Owner: Varies among component schemas	Note: Change only the input fields below that you wish to modify and values will be applied to all selected rows.									
Schema Owner: Varies among component schemas Schema Password: ************************************	Vendor: Oracle ▼ DBMS/Service: orcl									
Convert to GridLink Convert to RAC multi data source Don't convert Component Schema DBMS/Service Host Name Port Schema Owner Schema PAC configuration for component schema DBMS/Service Host Name Port Schema Owner Schema PAGE DEV_OPAM ************************************	Oracle's Driver (Thin) for Serv	e: localhost								
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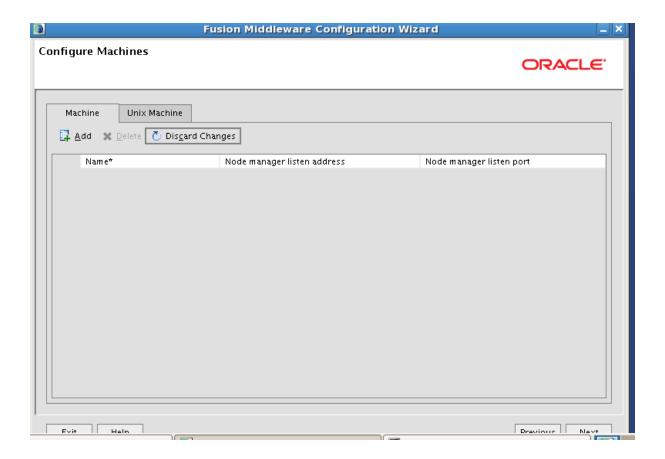


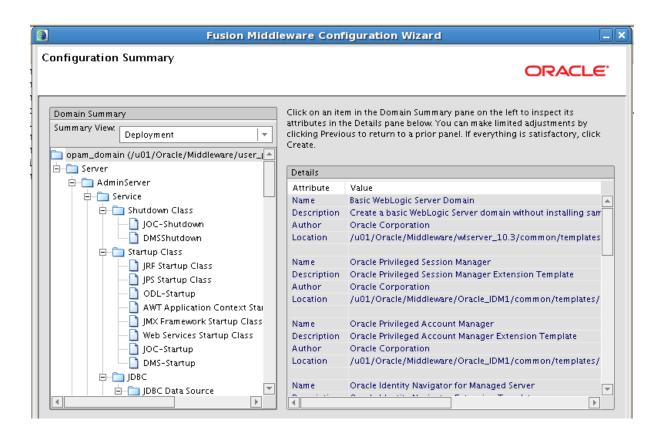


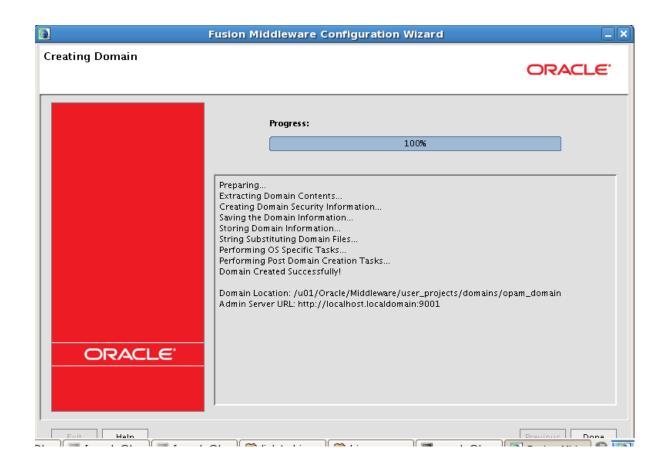












3. Configure the Database Security Store

We have configured OPAM in a new Weblogic Domain altogether. *All the domains share the same Database Security Store and use the same domain encryption key*

Export the domain encryption key from existing domain

cd /u01/Oracle/Middleware/oracle_common/common/bin

./wlst.sh

Middleware/modules/features/weblogic.server.modules_10.3.6.0.jar:/u01/0racle/Middleware/wlserver_10.3/server/lib/webser s.jar:/u01/Oracle/Middleware/modules/org.apache.ant_1.7.1/lib/ant-all.jar:/u01/Oracle/Middleware/modules/net.sf.antcont 1.1.0.0_1-0b2/lib/ant-contrib.jar::/u01/0racle/Middleware/oracle_common/modules/oracle.jrf_11.1.1/jrf-wlstman.jar:/u01/ le/Middleware/oracle_common/common/wlst/lib/adfscripting.jar:/u01/Oracle/Middleware/oracle_common/common/wlst/lib/adf-s -mbeans-wlst.jar:/u01/0racle/Middleware/oracle common/common/wlst/lib/mdswlst.jar:/u01/0racle/Middleware/oracle common/ on/wlst/resources/auditwlst.jar:/u01/0racle/Middleware/oracle_common/common/wlst/resources/igfwlsthelp.jar:/u01/0racle/ leware/oracle_common/common/wlst/resources/jps-wlst.jar:/u01/Oracle/Middleware/oracle_common/common/wlst/resources/jpstrustprovider.jar:/u01/0racle/Middleware/oracle_common/common/wlst/resources/jrf-wlst.jar:/u01/0racle/Middleware/oracle mon/common/wlst/resources/oamap_help.jar:/u01/Oracle/Middleware/oracle_common/common/wlst/resources/oamAuthnProvider.ja 01/Oracle/Middleware/oracle_common/common/wlst/resources/ossoiap_help.jar:/u01/Oracle/Middleware/oracle_common/common/w resources/ossoiap.jar:/u01/0racle/Middleware/oracle_common/common/wlst/resources/ovdwlsthelp.jar:/u01/0racle/Middleware ${\tt cle_common/common/wlst/resources/sslconfigwlst.jar:/u01/0racle/Middleware/oracle_common/common/wlst/resources/wsm-wlst.}$ /u01/Oracle/Middleware/utils/config/10.3/config-launch.jar::/u01/Oracle/Middleware/wlserver 10.3/common/derby/lib/derby jar:/u01/0racle/Middleware/wlserver_10.3/common/derby/lib/derbyclient.jar:/u01/0racle/Middleware/wlserver_10.3/common/d /lib/derbytools.jar:: Initializing WebLogic Scripting Tool (WLST) ...

Initializing WebLogic Scripting Tool (WLST) ...
Welcome to WebLogic Server Administration Scripting Shell
Type help() for help on available commands
wls:/offline>

exportEncryptionKey(jpsConfigFile="/u01/Oracle/Middleware/user_projects/domains/oim_domain/config/fmwconfig/jps-config.xml",keyFilePath="/u01/",keyFilePassword="Password123")

```
Initializing WebLogic Scripting Tool (WLST) ...

Welcome to WebLogic Server Administration Scripting Shell

Type help() for help on available commands

wls:/offline> exportEncryptionKey(jpsConfigFile="/u0l/Oracle/Middleware/user_projects/domains/oim_domain/config/fmwconfig/jps-config.xml",keyFilePath="/u0l/",keyFilePassword="Password123")

Apr 10, 2014 1:19:23 PM oracle.security.jps.util.JpsUtil disableAudit

INFO: JpsUtil: isAuditDisabled set to true

Apr 10, 2014 1:19:25 PM oracle.security.jps.util.JpsUtil disableAudit

INFO: JpsUtil: isAuditDisabled set to false

Export of Encryption key(s) is done. Remember the password chosen, it will be required while importing the key(s)

wls:/offline>
```

The encryption key file will be created

weallet.p12 3,568 10-04-2014 13:19:25 rv----- oracle

Use this encryption key to join the DB Security Store

Execute the below command

/u01/Oracle/Middleware/oracle_common/common/bin/wlst.sh /u01/Oracle/Middleware/Oracle_IDM1/common/tools/configureSecurityStore.py -d

/u01/Oracle/Middleware/user_projects/domains/opam_domain -c IAM -p password -m join -k /u01/ -w Password123



Apr 10, 2014 1:25:52 PM oracle.security.jps.internal.tools.utility.JpsUtilMigrationPolicyImpl migrateAllPolicyData INFO: Migration of All[Application + Global] policies in progress....
INFO: Found persistence provider "org.eclipse.persistence.jpa.PersistenceProvider". OpenJPA will not be used.
INFO: Found persistence provider "org.eclipse.persistence.jpa.PersistenceProvider". OpenJPA will not be used.
WLS ManagedService is not up running. Fall back to use system properties for configuration.
Apr 10, 2014 1:26:14 PM oracle.security.jps.internal.tools.utility.destination.apibased.JpsDstPolicy migrateData
INFO: Migration of Admin Role Members started
Apr 10, 2014 1:26:14 PM oracle.security.jps.internal.tools.utility.destination.apibased.JpsDstPolicy migrateData
INFO: Migration of Admin Role Members completed in 00:00:00
Apr 10, 2014 1:26:14 PM oracle.security.jps.internal.tools.utility.JpsUtilMigrationPolicyImpl migrateAllPolicyData
INFO: Migration of All[Application + Global] policies completed, Time taken for migration is 00:00:22
Data is migrated to the store. Check logs for any failures or warnings, if logging is enabled.
Info: Join operation has completed successfully.
[oracle@localhost bin]\$

4. Start OPAM Domain Weblogic Admin server

cd /u01/Oracle/Middleware/user_projects/domains/opam_domain/bin ./startWeblogic.sh

```
oracle@localhost:/u01/Oracle/Middleware/user projects/domains/opam domain/bir
File Edit View Terminal Tabs Help
n" has no key column.
                        It will not be collected.>
" has no key column. It will not be collected.
<Apr 10, 2014 1:30:58 PM IST> <Warning> <oracle.dms.collector> <DMS-50966> <Metric table "reports:Reports Server Response"</p>
has no key column. It will not be collected.>
Apr 10, 2014 1:30:58 PM IST> <Warning> <oracle.dms.collector> <DMS-50966> <Metric table "reports:Reports_Servlet_Response"
has no key column. It will not be collected.>
<Apr 10, 2014 1:30:58 PM IST> <Warning> <oracle.dms.collector> <DMS-50966> <Metric table "reports:Remote_Bridge_Elements" h
                    It will not be collected.>
as no key column.
<Apr 10, 2014 1:30:59 PM IST> <Warning> <oracle.dms.collector> <DMS-50966> <Metric table "webcache:request_filter_denied_st</pre>
ats" has no key column. It will not be collected.>
<Apr 10, 2014 1:31:00 PM IST> <Notice> <Log Management> <BEA-170027> <The Server has established connection with the Domain</pre>
 level Diagnostic Service successfully.>
Apr 10, 2014 1:31:00 PM IST> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to ADMIN<
<Apr 10, 2014 1:31:00 PM IST> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to RESUMING>
<Apr 10, 2014 1:31:00 PM IST> <Notice> <Server> <BEA-002613> <Channel "Default[2]" is now listening on 127.0.0.1:9001 for p</pre>
rotocols iiop, t3, ldap, snmp, http.>
<Apr 10, 2014 1:31:00 PM IST> <Notice> <Server> <BEA-002613> <Channel "Default" is now listening on 192.168.237.136:9001 fo</p>
r protocols iiop, t3, ldap, snmp, http.>
Apr 10, 2014 1:31:00 PM IST> <Notice> <Server> <BEA-002613> <Channel "Default[1]" is now listening on fe80:0:0:0:20c:29ff:
fe9f:950:9001 for protocols iiop, t3, ldap, snmp, http.>
<Apr 10, 2014 1:31:00 PM IST> <Notice> <Server> <BEA-002613> <Channel "Default[3]" is now listening on 0:0:0:0:0:0:0:0:1:9001</p>
for protocols iiop, t3, ldap, snmp, http.>
<Apr 10, 2014 1:31:00 PM IST> <Notice> <WebLogicServer> <BEA-000331> <Started WebLogic Admin Server "AdminServer" for domai
  "opam_domain" running in Development Mode>
<Apr 10, 2014 1:31:00 PM IST> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to RUNNING> <Apr 10, 2014 1:31:00 PM IST> <Notice> <WebLogicServer> <BEA-000360> <Server started in RUNNING mode>
[oracle@localhost:~1
```

5. Perform Post Installation Tasks

Set up ANT_HOME, ORACLE_HOME, JAVA_HOME and the permgen size.

```
export ORACLE_HOME=/u01/Oracle/Middleware/Oracle_IDM1

export ANT_HOME=/u01/Oracle/Middleware/modules/org.apache.ant_1.7.1

export JAVA_HOME=/u01/jdk1.7.0_45

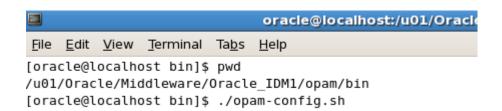
export ANT_OPTS="-Xmx512M -XX:MaxPermSize=512m"
```

```
File Edit View Terminal Tabs Help

[oracle@localhost ~]$ export ORACLE_HOME=/u01/Oracle/Middleware/Oracle_IDM1
[oracle@localhost ~]$ export ANT_HOME=/u01/Oracle/Middleware/modules/org.apache.ant_1.7.1
[oracle@localhost ~]$ export JAVA_HOME=/u01/jdk1.7.0_45
[oracle@localhost ~]$ export ANT_OPTS="-Xmx512M -XX:MaxPermSize=512m"
[oracle@localhost ~]$
```

cd /u01/Oracle/Middleware/Oracle_IDM1/opam/bin

./opam-config.sh



Provide below info when prompted

```
<u>F</u>ile <u>E</u>dit <u>V</u>iew <u>T</u>erminal Ta<u>b</u>s <u>H</u>elp
[oracle@localhost bin]$ pwd
/u01/Oracle/Middleware/Oracle_IDM1/opam/bin
[oracle@localhost bin]$ ./opam-config.sh
Buildfile: /u01/0racle/Middleware/Oracle_IDM1/opam/config/build.xml
    [input] Enter WebLogic Admin Username:
weblogic
Enter WebLogic Admin Password:
    [input] Enter WebLogic URL: (t3://<weblogic-host>:<weblogic-port>)
t3://localhost:9001
    [input] Enter WebLogic Domain Name
opam_domain
    _
[input] Enter Middleware Home
/u01/Oracle/Middleware
set-loafile:
    [touch] Creating /u01/Oracle/Middleware/user_projects/domains/opam_domain/opam-config.log
     [echo] Configuring WebLogic for OPAM. This may take a few minutes...
     [echo] Check Log File at /u01/Oracle/Middleware/user_projects/domains/opam_domain/opam-config.log
BUILD SUCCESSFUL
Total time: 2 minutes 0 seconds
A non-dynamic change has been made which affects the WebLogic AdminServer. The server must be rebooted in order to consume
this change.
[oracle@localhost bin]$
```

Restart Weblogic admin Server

6. Start OPAM managed server

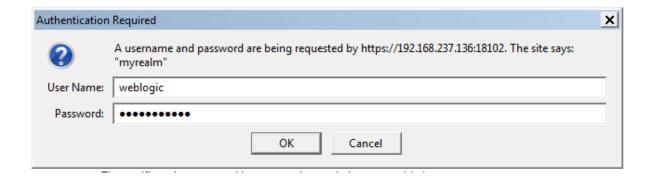
cd /u01/Oracle/Middleware/user_projects/domains/opam_domain/bin

./startManagedWebLogic.sh opam_server1



7. Check OPAM server

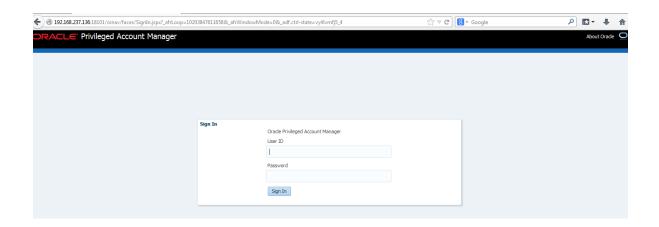
Browse to https://HOST:PORT/opam and authenticate via weblogic admin credentials



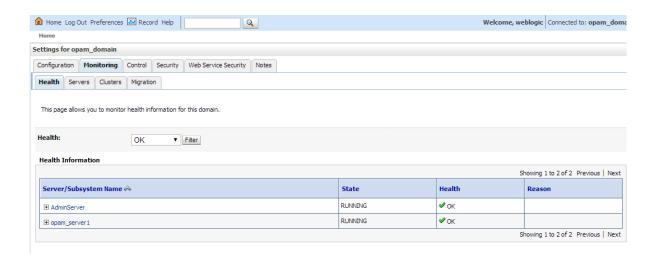
{"ServerState":{"Status":"Oracle Privileged Account Manager Server is up!","StatusCode":0},"Requestor":"weblogic","RequestorGroups":
["Administrators"],"version":"11.1.2.2.0"}

8. Check OPAM Admin console

Browse to http://HOST:PORT/oinav/opam and authenticate via weblogic admin credentials



9. Sanity check OPAM weblogic admin server



Name 💫	State	Health	Туре	Deployment Order	
	State	Health	туре	Deployment Order	
adf.oracle.businesseditor(1.0,11.1.1.2.0)	Active		Library	100	
adf.oracle.domain(1.0,11.1.1.2.0)	Active		Library	100	
adf.oracle.domain.webapp(1.0,11.1.1.2.0)	Active		Library	100	
⊞	Active	⊘ OK	Web Application	5	
⊞ ☐FMW Welcome Page Application (11.1.0.0.0)	Active	⊘ ОК	Enterprise Application	5	
i sf(1.2,1.2.9.0)	Active		Library	100	
istl(1.2,1.2.0.1)	Active		Library	100	
t ohw-rcf(5,5.0)	Active		Library	100	
t ohw-uix(5,5.0)	Active		Library	100	
⊞oinav (11.1.1.3.0)	Active	⊘ OK	Enterprise Application	500	
⊞opam (11.1.2.0.0)	Active	✓ OK	Enterprise Application	500	
⊞opamsessionmgr	Active	⊘ OK	Enterprise Application	500	
oracle.adf.dconfigbeans(1.0,11.1.1.2.0)	Active		Library	100	
oracle.adf.desktopintegration(1.0,11.1.1.2.0)	Active		Library	100	